input processing **500**. When the decision **506** determines that another input has been received, then other processing is performed **508** to perform any operations or actions caused by the other input. Following the operation **508**, the user input processing **500** is complete and ends. On the other hand, when the decision **506** determines that no other input has been received, then the user input processing **500** returns to repeat the decision **504**.

[**0056**] Once the decision **504** determines that a rotational movement input has been received, then the rotational movement is converted **510** to a linear movement. Then, a next portion of the list of items (and placement of the select bar over one of the items) is determined **512**. Thereafter, the next portion of the list of items is displayed **514**. The linear movement operates to move the select bar (or other visual identifier) within the list. In other words, the select bar is scrolled upwards or downwards by the user in accordance with the linear motion. As the scrolling occurs, the portion of the list being displayed changes. Following the operation **514**, the user input processing **500** is complete and ends. However, if desired, the user input processing **500** can continue following operation **514** by returning to the decision **504** such that subsequent rotational movement inputs can be processed to view other portions of the list items in a similar manner.

[**0057**] **FIG. 6** is a block diagram of a rotary input display system **600** in accordance with one embodiment of the invention. By way of example, the rotary input display system **600** can be performed by a computing device, such as the computer system **50** illustrated in **FIG. 1A** or the media player **100** illustrated in **FIG. 1B**. The rotary input display system **600** utilizes a rotational input device **602** and a display screen **604**. The rotational input device **602** is configured to transform a rotational motion **606** by a user input action (e.g., a swirling or whirling motion) into translational or linear motion **608** on the display screen **604**. In one embodiment, the rotational input device **602** is arranged to continuously determine either the angular position of the rotational input device **602** or the angular position of an object relative to a planar surface **609** of the rotational input device **602**. This allows a user to linearly scroll through a media list **611** on the display screen **604** by inducing the rotational motion **606** with respect to the rotational input device **602**.

[**0058**] The rotary input display system **600** also includes a control assembly **612** that is coupled to the rotational input device **602**. The control assembly **612** is configured to acquire the position signals from the sensors and to supply the acquired signals to a processor **614** of the system. By way of example, the control assembly **612** may include an application-specific integrated circuit (ASIC) that is configured to monitor the signals from the sensors to compute the angular location and direction (and optionally speed and acceleration) from the monitored signals and to report this information to the processor **614**.

[**0059**] The processor **614** is coupled between the control assembly **612** and the display screen **604**. The processor **614** is configured to control display of information on the display screen **604**. In one sequence, the processor **614** receives angular motion information from the control assembly **612** and then determines the next items of the media list **611** that are to be presented on the display screen **604**. In making this determination, the processor **614** can take into consideration the length of the media list **611**. Typically, the processor **614** will determine the rate of movement such that the transitioning to different items in the media list **611** can be performed faster when moved at greater speeds. In effect, to the user, the more rapid the rotational motion or acceleration, the faster the transitioning through the list of media items **611**. Alternatively, the control assembly **612** and processor **614** may be combined in some embodiments.

[**0060**] Although not shown, the processor **614** can also control a buzzer to provide audio feedback to a user. The audio feedback can, for example, be a clicking sound produced by a buzzer **616**. In one embodiment, the buzzer **616** is a piezoelectric buzzer. As the rate of transitioning through the list of media items increases, the frequency of the clicking sounds increases. Alternatively, when the rate of transitioning slows, the frequency of the clicking sounds correspondingly slows. Hence, the clicking sounds provide audio feedback to the user as to the rate in which the media items within the list of media items are being traversed.

[**0061**] The various aspects or features of the invention described above can be used alone or in various combinations. The invention is preferably implemented by a combination of hardware and software, but can also be implemented in hardware or software. The invention can also be embodied as computer readable code on a computer readable medium. The computer readable medium is any data storage device that can store data which can thereafter be read by a computer system. Examples of the computer readable medium include read-only memory, random-access memory, CDROMs, DVDs, magnetic tape, optical data storage devices, and carrier waves. The computer readable medium can also be distributed over network-coupled computer systems so that the computer readable code is stored and executed in a distributed fashion.

[**0062**] The advantages of the invention are numerous. Different embodiments or implementations may yield one or more of the following advantages. It should be noted that this is not an exhaustive list and there may be other advantages which are not described herein. One advantage of the invention is that a user is able to traverse through a displayed list of items (e.g., media items) using a rotational user input action. Another advantage of the invention is that a user is able to easily and rapidly traverse a lengthy list of items (e.g., media items).

[**0063**] The many features and advantages of the present invention are apparent from the written description, and thus, it is intended by the appended claims to cover all such features and advantages of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation as illustrated and described. Hence, all suitable modifications and equivalents may be resorted to as falling within the scope of the invention.

What is claimed is:

1. A portable media player, comprising:

a storage disk drive that stores media content for each of a plurality of media items;

a display screen that displays a portion of the media items at a time;